ABSTRACT:

The invention relates to a method of recognizing a speech utterance ($\underline{s}$) available in spelled form, comprising a processing stage in which a corresponding letter sequence ($\underline{r}$) is estimated by means of a letter speech recognition unit (2) based on Hidden Markov Models, and including a second processing stage (3) in which the estimated result ($\underline{r}$) produced by the first processing stage utilizing a statistical letter sequence model (4) and a statistical model (5) for the speech recognition unit (2) is post-processed, while the dynamic programming method is used during the post-processing.

For providing robust and efficient speech recognition procedures for the use of speech signals for system control, there is proposed that the grid structure on which the dynamic programming is based and whose node points are provided for the assignment to accumulated probability values, is converted into a tree structure and that the A* algorithm is used for finding an optimum tree path.

Also a method is proposed in which within the scope of speech control a complete word is input as a control signal and at least part of this word in spelled form is input, while the result of the letter speech recognition is used within the scope of the word speech recognition.

Fig. 4